

# Frac Facts

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## Industry's Misleading Statements about Hydraulic Fracturing (or Fracking) and How Best to Respond

By Lois Epstein, P.E., Engineer (July 2014)

**Misleading Statement #1:** Hydraulic fracturing has been used for decades.

**Reality:** This is not your grandmother's fracking.

**Facts:** While hydraulic fracturing has been used for many years in "conventional" oil and gas wells, only in recent years has it been used in combination with directional drilling (also known as slant, i.e., non-vertical drilling). Densely-packed, hydraulically fractured wells are able to extract oil and gas from "unconventional" i.e., relatively non-porous, underground rock formations such as shale and other "tight" rock formations. Hydraulic fracturing uses high pressure fluids and chemicals to create underground explosions that fracture the formations allowing oil and gas to flow to the wells. The hydraulically fractured formations generally are located in different areas than conventional oil and gas formations.

**Misleading Statement #2:** Hydraulic fracturing does not cause groundwater contamination.

**Reality:** Fracking activities can and do cause contamination.

**Facts:** While the actual act of fracturing rarely causes contamination, many of the activities associated with hydraulic fracturing operations can cause water contamination including chemical storage and wastewater management. Moreover, poorly constructed fractured wells passing through certain geologic formations can result in methane migration into subsurface water supplies (see [stateimpact.npr.org/pennsylvania/tag/methane-migration/](http://stateimpact.npr.org/pennsylvania/tag/methane-migration/)), and fractures reaching improperly installed wells can result in spills (see [www.eenews.net/stories/1059985587](http://www.eenews.net/stories/1059985587)).

**Misleading Statement #3:** States adequately regulate hydraulic fracturing.

**Reality:** There is no consistent approach among states to regulate fracking, and that is really needed.

**Facts:** State approaches vary widely. Some states require certain best practices, while others do not. According to industry's FracFocus website ([fracfocus.org/hydraulic-fracturing-how-it-works/casing](http://fracfocus.org/hydraulic-fracturing-how-it-works/casing)):

*While nearly all states require the circulation of cement on surface casing, it is not a universal requirement...In some states it is common for state personnel to witness the running and cementing of casing strings, while in other states the submission of a completion report which details the amounts and types of casing and cement used in the completion of the well is considered sufficient evidence of proper well construction.*

States clearly have variable regulations, with some states having only non-protective and/or inadequately enforced requirements. Despite these state-level deficiencies, H.R. 2728 – passed by the U.S. House of Representatives in 2013 but not yet law – prohibits the Bureau of Land Management (BLM) from regulating hydraulic fracturing operations on its lands even if states have only minimal hydraulic fracturing regulations or guidelines (which are unenforceable). BLM currently is working on regulations to address hydraulic fracturing on public lands.

**Misleading Statement #4:** There is adequate information available to the public on the chemicals used in hydraulic fracturing.

**Reality:** Companies share only what they want to share.

**Facts:** The public deserves information on hydraulic fracturing chemicals to ensure that groundwater wells and surface water supplies are not contaminated by fracturing operations. Without information on the chemicals used in hydraulic fracturing, it is impossible to determine if water supplies have been contaminated by chemicals that were not present prior to fracturing, and for emergency responders to know how best to react. FracFocus ([www.fracfocus.org](http://www.fracfocus.org)) is a website managed by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. It provides voluntarily-submitted – and thus not complete – information on chemicals used in fracturing operations nationwide listed by individual wells. FracFocus does not include information claimed as "trade secrets" by those reporting, and does not allow aggregation of multiple well data, which makes it extremely difficult to assess total chemical use in a given area. The U.S. Environmental Protection Agency currently is considering how to provide more chemical-specific information from hydraulic fracturing operations to the public (see [www.regulations.gov/#!documentDetail;D=EPA-HQ-OPPT-2011-1019-0001](http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPPT-2011-1019-0001)).